HIERONYMUS MUENZER AND OTHER FIFTEENTH CENTURY BIBLIOPHILES*

E. P. Goldschmidt

London

glancing over the bookshelves in his library, it is all the more certain that when by some kind chance the entire book collection of a scholar of 500 years ago has been preserved for us through the centuries, we will be able to gather quite a good deal of valuable knowledge about him, his way of life, his interests, and his work, by studying the volumes of his library.

It was my good fortune over twenty years ago, when I was working for the incipient Gesamtkatalog der Wiegendrucke, to stumble upon such a survival, the library of a XVth century physician who lived at Nuernberg and died in 1508. It was in the library of Prince Dietrichstein at Nikolsburg, Moravia, that I found, while cataloguing a collection of about 600 incunabula which had stood there undisturbed since the XVIIth century, that over and over again in the covers of the ancient bindings, the same owner's inscription in red ink kept on recurring, and it was soon obvious that some XVth century collection was here incorporated in its entirety. As I went on with my work, I kept track of these volumes and finally found that out of the 600, about 150 volumes bore this entry: "Hic liber est mei Hieronymi Monetarii de Feltkirchen, artium et medicinae doctoris, quem mihi comparavi Nuremberge anno Domini 1482"—or something like that.

Naturally, I not only made a list of these books which had remained so conveniently together, but I tried my best, off and on through the last twenty years, to find out all I could about this Dr. Monetarius, who he was, where he lived, and what he did. After all sorts of delays and vicissitudes, and after the Nikolsburg library has ultimately been entirely dispersed and scattered all over the world, I am now at last about to publish a little book on the man and his library, and thus to preserve the record at least of an interesting survival which unfortunately has not

^{*} Read before the Section of Historical and Cultural Medicine, January 12, 1938

itself been able to withstand the upheavals of these post-war years.

I should like to tell you a little about this Dr. Hieronymus Muenzer or Monetarius, about the books he owned, about his travels, of which he left us such an interesting record, and finally, in order to show that such a standard of culture, of learning, and of book-collecting was by no means so very exceptional, about some other German physicians of the same period whose books have survived to our day.

Muenzer was born exactly 500 years ago at the town of Feldkirch in Vorarlberg, which many of us know as the frontier and passport-control station for travellers entering Austria from Switzerland. I am precise, for it is by no means on the frontier between Austria and Switzerland, since at that exact spot a strange oversight of history has spared to survive to this very day the independent principality of Lichtenstein. So when you leave Buchs in Switzerland and arrive in Feldkirch in Austria, your train has without warning and without stopping traversed the entire breadth—about four miles—of this very ancient state.

Muenzer came of a good family, we may presume, for his sisters married quite eminent people, but they were poor, for he tells us in one of his extant notes that it was by the help of "pious people" that he was enabled to study. He matriculated at Leipzig University in 1464 and took his M. A. in 1470; he remained another four years as a junior lecturer in the Arts course and not only maintained himself but even managed to save 400 florins in that way. We may note that Muenzer was comparatively old at twenty-seven when he first began his university studies: at that time it was quite usual for students to enter at the age of fifteen. There is a manuscript in Muenzer's library which proves that he had begun to turn to medicine before he left Leipzig, a folio volume on paper containing an extensive "Herbarius," Bernardus de Gordonio's "De ingeniis curationum," a brief "Bona Anothomia," and other medical texts; in the front cover he has noted: "Iste liber medicinalis est mei Hieronymi Monetarii de Feldkirchen artium et medicine doctoris quem mihi comparavi in studio lipezensi anno 1470." It is now in the Wellcome Museum in London.

However, it was at that time considered an established fact that a first rate medical training could not be obtained in the comparatively new German universities, and only the Italian M.D. degrees of Bologna, Padua, and Pavia gave a medical man the prestige that enabled him to get into the first rank. That this state of affairs was quite officially

recognized, we can prove from a resolution passed in 1463 by the Faculty of Arts of the University of Heidelberg, by which leave of absence was granted to a Magister Nicolaus Swarczunz to go and study in the medical faculty "que non vigeret in Almania," "Which was not flourishing in Germany." We happen to know how it became possible for Muenzer to continue his medical studies at Pavia. In the summer of 1470 when Muenzer took his M.A. degree, a young Nuernberg patrician, Anton Tetzel, matriculated at Leipzig, and it was as this boy's private tutor, and at his expense, that Muenzer could go to Pavia in 1476 and complete his medical studies there, taking his M.D. in 1478.

Of Muenzer's Pavia period some interesting relics survive among his books. For example, one of his actual medical lecture notebooks containing the "Anatomy" of Mundinus, and considerable excerpts from Galen and Haly Abbas, "consilia" of his teachers, Antonio Guaineri and Ambrosio Binasco, and other matters. That he did not neglect the practical side of therapeutics for his theoretical studies is shown by a verse he entered on the flyleaf:

"Dum dolet infirmus/medicus sit pignore firmus

Nam si post queris/querendo hostis eris

Non didici gratis/hec musa sacra Hippocratis

Egris (imp . . .?) serviet absque dativis."

(While the patient is in pain let the doctor make sure of his reward For if you ask for it afterwards you will only make yourself unpopular by asking.

It is not without cost that I have learned the venerable science of Hippocrates

But impecunious patients he may serve without remuneration.) This interesting volume is now in the library of Dr. Harvey Cushing at New Haven. It is from Pavia also that Muenzer brought back some of the fine books which went to form his library, and we may assume that it was there that he first became infected with the book-collecting bacillus and that the nucleus of his library was brought together. Of course, this period, 1477-8, in which he first became financially able to spend some money on books, coincided with the first great burst of activity of the printers which brought books within the reach of people with moderate incomes.

At Nikolsburg, I found at least ten volumes in which Muenzer had noted his purchase as a student at Pavia, but there are at least about fifteen or twenty that fall in this period. There is an Avicenna "Canon", 1473, a Saliceto of 1476, two works of his teacher Guainerius: "De Febribus," and "De Matricibus," 1474, the "Pandecta Medicinae" of Sylvaticus. The "Antidotarium" of Falcutius, bound with the Albucasis, both printed by Jenson in 1471, are now in the Boston Medical Library. But even then Muenzer did not by any means confine himself to medical books. There are his Juvenal of 1474, with extremely amusing marginal notes, now in the Yale University Library; a Lucan; a Quintilian; a Diogenes Laertius; a Sallust; the "Cosmography" of Aeneas Sylvius. His first book of all, perhaps, is the Aristotle, "De Animalibus," Venice 1476, in which he made this vivid entry recording its acquisition:

"In the year of the Lord 1476, in the last days of December, when we celebrate the birth of our Saviour and indulge in all sorts of games and pastimes, I obtained this very fine book at cards and dice. By the kindness of certain noble students of the German nation who were then studying in the faculty of Civil Law in the famous University of Pavia, at the time when Galeazzo Maria, Duke of Milan, the fifth to hold the tyranny in that principality, was killed by the dagger of a poor devil at Milan."

Immediately after leaving Pavia, the newly promoted M.D., again no doubt through the influence of his pupil, Tetzel, obtained permission to settle and practise at Nuernberg, and the appointment as one of the "Physici" of the city of Nuernberg, which I suppose corresponded to something we in England call, "Medical Officer of Health." We happen to have one of Muenzer's official reports to the City Council, made within a year of his establishment, when he gave his opinion on their enquiry whether the practise of using sulphur to clarify wine was detrimental and whether it should be prohibited. Muenzer's consilium, dated 27 October 1479, makes a great display of quotations from two dozen authorities, from Galenus and Avicenna to Gordonius and Arnoldus de Villanova, and leaves the question open. It has been preserved for us through the zeal of his friend, Hartmann Schedel (of whom more anon) in a Munich manuscript, codex latinus monacensis 456.

In 1480, Muenzer got married, and his only child, his daughter Dorothea, in 1499 became the wife of that Hieronymus Holzschuher whose honest face is familiar to so many people, because his portrait by Albrecht Dürer is one of the best known pictures in the world.

In 1483, a serious outbreak of the plague overwhelmed Nuernberg,

and before it was over caused about 4000 deaths in less than a year. The council immediately at the start of the epidemic, required its four appointed physicians, Hermann and Hartmann Schedel, Johannes Kraemer, and Hieronymus Muenzer to give out a kind of official notice of advice to the population how best to preserve themselves from the pestilence. This consilium again is extant, also through the industry of Hartmann Schedel, in codex latinus monacensis 441, and is quite an interesting document for our knowledge of XVth century hygiene:

"First and foremost," we read, "all the medical authorities recommend flight and to escape as soon as possible from the city and region where the pestilence is reigning, and to go far away and not to return but slowly when the poisoned air is properly clean again." For those who for one reason or another cannot escape from the city, the doctors recommend a number of prophylactic measures such as; fumigations, certain pills which you can obtain at the chemists, certain special powders also obtainable at the druggists, a special draught, etc., all these being put forth obviously without any profound conviction and seemingly more out of a friendly regard for the kindred profession of pharmacy. Anyhow, Muenzer himself, in spite of his position as official physicus to the city of Nuernberg, followed his own best advice and departed. He left Nuernberg on the 12th of September 1483 and went to Italy, visited Pavia again, then Bologna, Florence, Rome, and Naples, and came back in January 1484, quite pleased, as he records, to find his wife, child, and all his servants quite safe and sound on his return. He is quite frank about his motive in the brief record he has left of this little trip:

"In the year 1483, struck by the fear of a contagious pestilence, I thought that those are least likely to die in a war or in a plague who are not in them; and so, having decided to escape, I left Nuernberg in September," and so on.

Our Doctor Muenzer had been doing well in his medical practice. He tells us that in the first year he made over 500 florins, which must have been very respectable, and he could afford not only to travel but to buy some very fine books. Quite a number of them have survived and he notes in their covers that he bought his Gordonius, "Lilium Medicine", at Naples, his Claudianus and Solinus at Rome, his Boccacio, Theophrastus, and others at Milan.

In the following year, 1484, this time apparently without any pestilential inducement, the doctor made another little tour down the

Rhine to Aix-la-Chapelle and Belgium, allowing himself only eighteen days altogether for the trip. It is obvious that Muenzer enjoyed travelling in spite of the discomforts of journeying by mule and hack and the chances of indifferent accommodation for the night.

For the next ten years, for all we know, he seems to have remained at Nuernberg, attending not only to his practice and to his library, but also to quite extensive and definitely successful business enterprises. We learn about these trading engagements, mostly in partnership with his brother Ludwig, from the brief statement on his financial position which he drew up in 1507 shortly before his death and which is preserved in the library of the Germanic Museum at Nuernberg. That his friends looked upon him as a business-man as well as a physician, can be gathered from a letter of thanks addressed to him by Sixtus Tucher in which he hopes to hear from him "cum a tuis mercaturae ac medicinae negociis vacaveris:" (when you can spare the time from your medical practice and business affairs.)

In those busy years his library was steadily growing, as we can well observe by noting the dates of purchase which he generally, though not always very reliably, wrote inside the covers of his books. His interests, as we can gather from these, remained very general, and in fact it is not the field of medicine that predominates among these acquisitions after 1484. There are two special predilections we can deduce from his books. He became an enthusiastic admirer of the Platonic philosophy which was gaining such a wide following among the humanists of the late XVth century. This vogue was partly a reaction against the over-subtilised and academically over-elaborated Aristotelianism which had dominated in the European universities for two centuries; but certainly also due to the wonderful appeal the newly rediscovered and recently translated works of Plato and Plotinus made to the men to whom they came as fresh novelties, not as old textbooks read as a matter of duty in class. Muenzer obtained the first Plato in Ficino's Latin translation, of course (the Greek was not printed till 1513, and Muenzer could not have read it even if it had been available) immediately on its publication, from Florence in 1487. The Plotinus of 1492 also came to him immediately after its appearance "ex Florentia Tuscie civitate anno Domini 1493 . . . Oh quam praeclarus et plenus philosophia hic liber est!" And in 1494 he makes an even more enthusiastic and fervent entry in his "Mercurius Trismegistus," a late Neo-Platonist treatise of mystical philosophy, which

in Muenzer's day was erroneously supposed to be of much greater antiquity than either Plato or Aristotle.

Muenzer's predilection for this type of philosophical reading matter can most strikingly be proved from his note at the end of Aristotle's Politics:

"This most noble book on the State written in beautiful language and full of weighty sentences, has been read through by me Hieronymus Monetarius utriusque medicine doctor. I read it through, I say, for the sake of recreation, in the month of May 1499, when I was suffering of a dangerous disease, and used to alleviate the intolerable pain by this very agreeable reading at Nuernberg."

The other favourite study of Dr. Muenzer, which also shows up clearly from his library, his fine Ptolemy (the rare first edition) his Solinus, his Mela, Aeneas Sylvius, and other cosmographical writers, is *Geography*. In geographical science indeed we have evidence of an interest carried beyond mere quiet study, and manifesting itself actively both by original literary work in this field, and in the doctor's unquenchable desire for travel and the visiting of unknown lands.

Nuernberg in those days was a great commercial center, one of the most important on the continent, ranking with Venice, Florence, Antwerp, Augsburg, Lyons, and Bruges. The Nuernberg patricians, who sat in the senate of their self-governing city-republic, were many of them great merchants with world-wide interests in every market from the Baltic to the Mediterranean, from Russia to Portugal; many of them had been acting as agents for their family firms in remote countries, and they were wont to send their sons out to foreign ports and fairs to watch their interests. To this type of man, the scholar who could write neat Latin verse, or make an elegant speech, or write a well-phrased letter in Latin would mean very little; but a man who from his booklearning could produce knowledge of the remote countries of the globe, of the problems of navigation, and of the courses of the stars, would give an impressive proof that something worth while was to be gained from study. We have ample evidence that in the Nuernberg of the 1480's and '90's Dr. Muenzer was looked upon as the great authority in matters geographical. And when his friend, Hartmann Schedel, prepared his great Nuernberg Chronicle of 1493, that well-known encyclopedia of historical knowledge and the most famous picture book of the XVth century, it was to Muenzer that he turned for help to bring the geographical section of the work fully up to date. I have been able to prove by examining the extant original manuscript at Nuernberg and Schedel's own copy of his book preserved at Munich, that Muenzer is responsible not only for extensive corrections and additions to the geographical section at the end, such as, for instance, the passage on Martin Behaim's voyages along the coast of Africa, but that the map of central Europe added on the last pages, is his and not Schedel's work.

Muenzer's personal friendship with Martin Behaim, the seafarer, did not only lead him to supply the account of his voyage in the Schedel Chronicle, and very probably to collaborate in the making of Behaim's famous globe of 1492, which is still extant at Nuernberg; it ultimately made him undertake his greatest personal venture, his journey to Spain and Portugal in 1494-5, of which he has left us such an interesting account. Behaim himself is rather a mysterious and unsatisfactory person. The younger son of one of the foremost Nuernberg patrician families, he ran off to sea as a boy. He certainly did succeed in accompanying Diogo Cano and his Portugese sailors on a voyage along the African West Coast in 1484, and was knighted by the King of Portugal on his return. That, however, is all we know of his practical experience as a navigator, and on his globe, however beautiful and picturesque it may be, there is little evidence of any unusual knowledge either of Africa or any other part of the world. It is quite obvious, though, that he succeeded in impressing his Nuernberg friends with his tales of adventurous exploration, and, on the other hand, the Portugese authorities with his claims to profound astronomical and mathematical learning, for he was made a member of the Junta dos Mathematicos. Anyhow, whether he was an impostor or not (and Muenzer's experiences tend to show that he was), he induced Muenzer to write a very remarkable letter to King John of Portugal, dated Nuernberg, 14th July 1493. In this letter, the doctor recommends that the King should send out an expedition to sail westwards across the Atlantic Ocean and so to reach the Indies and Cathay, and he suggests Martin Behaim as a suitable captain for such an enterprise. He supports his theory with quotations from Aristotle, Seneca, and Pierre d'Ailly, and points to other indications, such as the existence of elephants both in India and in Africa, and the driftwood washed up by the sea on the western shores of the Azores, to prove the proximity of land in the west.

This extraordinary letter, which has such striking similarities to the

famous letter Toscanelli wrote in 1474 to a Portugese friend, would indeed have made our Dr. Monetarius a famous man, if it were not unfortunately a fact, which he could not know on July 14th when he wrote his letter, that Columbus had returned from his first voyage on March 4th. And even if he had known of Columbus' discovery of a few more islands in the western sea, this would not have affected his views any more than Columbus' own, for even on his third voyage the explorer was still endeavoring to reach Cathay, unaware that what he had stumbled upon would prove such a serious obstacle to that voyage.

Anyhow, it is clearly not unconnected with such projects that Muenzer in the following summer, 2nd of August 1494 to be exact, set out on his journey to Spain and Portugal, and had an audience with King John at Evora in November. But although he has left us a very detailed account of these interviews—he was four times asked to dine with the King—there is not a word on Behaim in this or anywhere else in the "Itinerary," and it looks as if that name, which seemed to him so powerful at Nuernberg, had lost its glamour when brought out at the Portugese court.

I obviously cannot give now an adequate or even a brief account of the varied and vivid interest of Muenzer's travel diary, in which he has left us a record of his journey from Nuernberg via Switzerland, Lyons, the Rhone valley, Perpignan, Barcelona, Seville, Madrid, Granada (quite recently conquered from the Moors), to Lisbon, and back via Sant' Iago de Compostella, Toulouse, Poitiers, Paris, Bruges, Cologne, and so to Nuernberg. He returned about Easter, 1495. It is a most valuable document, and it is astonishing that it should not hitherto have been published in its entirety. The principal and no doubt most exceptional portion of it, that relating to Spain and Portugal, was printed in the original Latin in the "Revue Hispanique" in 1920, and after that in both a Spanish and a Portugese translation; and it amounts to about two-thirds of the whole text which occupies 416 pages of the Munich manuscript in which it has survived. The rest-that is the journey from Nuernberg to the Spanish frontier and back from the Pyrenees to Nuernberg-has not yet been edited, and I am hoping to see it printed this year in a French periodical, "Renaissance et Humanisme." Of course, although unedited, the manuscript has by no means remained unknown; it has been frequently used and referred to, and little extracts have been given ever since Kunstmann, in 1854, wrote about it in the Transactions of the

Bavarian Academy and particularly quoted from it all that refers to the Spanish and Portugese discoveries. Naturally, with his keen interest in geographical matters, Muenzer had noted a good deal which he had heard about the overseas countries, especially West Africa, from navigators and merchants, but unforunately we seem to have lost a special discourse of his, "De insulis," to which he refers, but which was either never written, or has gone astray. It is interesting to note that one of the people he met in Madrid and who gave him a letter of recommendation on his way, was the Benedictine monk, Bernard Boil, who accompanied Columbus on his second voyage.

It does not seem that Muenzer brought back any books with him from Spain or Portugal. Anyhow none have survived at Nikolsburg; but he did buy some books for his library in Paris where he remained for ten days in the Spring of 1495. His account of Paris is one of the most detailed we possess of that period and should be most valuable for the local historians and topographers of that city; it is odd that it has never yet been printed.

Not much remains to be said on the remaining years of Muenzer's life; he seems to have continued quietly at Nuernberg, doctoring and collecting books until his death in 1508. Shortly before that, he visited his native town, Feldkirch, and gave a considerable part of his library to St. Nicholas Church there, a donation of which a few volumes have indeed survived, but of which we have a complete list in the Feldkirch archives, which enables us to complete the total of Muenzer's library with at least the titles of the books which have disappeared. On the same occasion, Muenzer established certain charitable trusts at Feldkirch, and an annual Mass which he endowed was indeed punctually said on his anniversary until quite recently.

Muenzer's Itinerarium has not come down to us in his autograph; the only copy we possess of it, the Munich manuscript, is written in the hand of his friend, Hartmann Schedel, the author of the "Nuernberg Chronicle." You may have noticed that, again and again, I have had to refer to things like Muenzer's report on the adulteration of wine or on the measures against the plague, as surviving in some manuscript written by Schedel. This may give you just an idea of the immense amount of most varied material whose survival and existence we owe to the industrious pen of Hartmann Schedel. Schedel, Muenzer's close colleague as official physicus of the city of Nuernberg, was indeed a prince of book-

collectors and a champion copier of books. He not only bought all books printed or manuscript he could get hold of, but, with indefatigable zeal, seized every opportunity to copy anything he could borrow or otherwise obtain. Schedel's famous library has been luckier than Muenzer's; about 350 manuscripts and 500 to 600 printed volumes of his still remain intact in the Munich Library, of which indeed they form the original nucleus. Comparatively few volumes have strayed from the fold, but one magnificent specimen at least is in the United States, his Petrus de Abano (Hain, No. 1), which is in Dr. Harvey Cushing's great library at New Haven. There also, you will find his copy of Nicolaus Leonicenus' book on Syphilis (1497), but it is rebound in XIXth century calf. It is surely remarkable and significant that two prominent physicians in one city and at the same time should have been great bibliophiles, and in a way, I suppose, I must beg your pardon for speaking first and at such length about my own pet discovery, Hieronymus Muenzer, rather than about Schedel, whose library was about four times the size and infinitely more important than Muenzer's. But Schedel's library has been well known and indeed famous for many years, long before Stauber's monograph on "Hartmann Schedel und seine Bibliothek" came out in 1908, while the minor star, Muenzer, has remained undiscovered and unknown. And if I am now able to demonstrate the existence of a closely analogous though less overwhelming second humanistic library in a Nuernberg physician's house before 1500, this fact will help us to recognise that Schedel's was by no means an isolated phenomenon, and that indeed the possession of a noble library was a fairly normal distinction of a successful German medical man of the Renaissance period.

Hartmann Schedel, unlike Muenzer, was the son of a Nuernberg patrician family, born at Nuernberg in 1440, and the cousin of another book-collecting physician, Hermann Schedel, whose books he inherited. Schedel also began his studies at Leipzig, where he entered at the normal age of sixteen, and took his M.A. in 1461. He continued his medical studies in Italy, not at Pavia but at Padua, where he took his M.D. degree in 1466. He has left us an interesting account of an "Anatomy," the very exceptional dissection of a corpse, held at Padua on March 20th to 24th 1465, under Dr. Antonio Bernardi, not without mentioning that ultimately the corpse was buried with great reverence and ceremony. On his return to Germany, he held appointments as town physician at Noerdlingen and Amberg before he settled down to practise in his

native city in 1484. He died a few years later than Muenzer, in 1514. Schedel's best known achievement, of course, is his famous "Chronicle," which was published by Anton Koberger at Nuernberg in 1493 in a double edition in Latin and in German, illustrated with the same woodcuts, 2000 copies of each being printed; this is a tremendous and unprecedented number for a XVth century publication. The whole enterprise was exceptional in its scope, and took about eight years to prepare, requiring the financial backing of two at least of the richest Nuernberg merchants. The illustrations alone-there are 1809 of themtook years to design and engrave, and we know that the studio of Michael Wolgemut, where Dürer had been an apprentice, was fully occupied with them over a long period. The book as it came out, must be acknowledged to be a complete and successful realization of the object aimed at: a popular encyclopaedia of all historical knowledge, beginning with Adam and Eve, giving an account of all the Emperors and Popes, of the foundation of all the principal cities of the world, with a view of them, of all the most famous men and women, with their portraits if possible, and not only carrying the tale of events right down to the date of publication, but even providing six blank leaves for the entering of any further important happenings until the Day of Doom; this and the Last Judgment are again fully recounted and illustrated, bringing the gigantic work to an appropriate and final conclusion.

This magnificently illustrated "World-Chronicle" must not be judged as a piece of original historical research, nor must we tax Schedel with credulity for including in it all the ancient and mediaeval mythical lore about pagan heroes and Christian saints, about strange wild tribes, and the legendary origins of cities. His aim was to include everything that was popularly known and current about the world and its history, not to provide a scholarly reference book. And although the "Nuernberg Chronicle" is not unprecedented as a world chronicle, except in the magnificence of its production, and its models: Bergomensis' Supplementum Chronicarum, and the Luebeck Rudimentum Noviciorum, can clearly be recognised, it did require a scholar of wide reading and one with an encyclopaedic library at his disposal to produce the result.

From the fact that Hartmann Schedel undertook it, and from the efficient way he carried it out, we can deduce the bent of his interests. History and Archaeology were his favourite subjects, and what we can deduce from his work on the "Chronicle," we find confirmed when

we analyse the surviving books in his library. Of course, Schedel also had his shelves full of medical books and even a notable number of important and early medical manuscripts; the classics, the great Latin poets and prose writers both of antiquity and of the Renaissance were there in even more impressive completeness than in Muenzer's library. Indeed, the two collections are very similar in a way, and not only do we find copies of the same edition in both libraries in about 100 cases, which shows that the two friends had about the same source of supply but that they even employed the same bookbinders. Both Schedel's and Muenzer's books have mostly survived in their solid original bindings, and we see generally the same tools and the same decorations used on the majority of them. Roughly, one might say that Schedel had nearly every book that Muenzer owned in either the same or a similar edition, but he had far more than Muenzer; and it is just in the field of history, of old chronicles, annals, local and general historical works, that Schedel's library clearly outdistances Muenzer's. These historial books, moreover, were mostly not available in printed editions, and Schedel did not confine himself to purchasing such manuscripts, but with indefatigable industry wrote and copied such texts wherever he could find them. Of Schedel's 350 manuscripts now at Munich, probably nearly half are written in his own beautifully clear calligraphic handwriting. They form an unexhausted store of the most heterogeneous texts. In his eager zeal, Schedel not only copied entire historical works, or the monastic annals he found in the different abbeys, but letters, speeches, rhymes and verses, epitaphs and inscriptions, in fact almost anything which could be transferred by pen to paper. It is through Schedel's passion for writing that we have Muenzer's "Travel Diary," and Ciriaco d'Ancona's most precious collection of Roman inscriptions, mostly since destroyed, and an untold number of more or less important historical documents. Every year almost, one might say, some historical scholar manages to attract a little attention by publishing some text "hitherto unedited" from one of Schedel's manuscripts. If Schedel knew how much valuable historical material modern scholars have quarried from his manuscripts, and how they rather condescendingly smile at his tremendous "Nuernberg Chronicle," I do not think he would be either surprised or hurt. He consciously undertook the "Chronicle" as a work for the popular dissemination of historical knowledge, and would have been quite satisfied to let his immortality rest on his achievements as a book-collector and antiquarian.

Schedel then is a second and even greater book-collecting physician living at the same time and in the same town as Muenzer; another great bibliophile and doctor of the XVth century was born in the same little Alpine town as Muenzer: Dr. Ulrich Ellenbog. Born at Feldkirch about 1430, he studied at Vienna where he took his B.A., at Heidelberg where he graduated M.A. in 1455, and finally finished his medical studies at Pavia, under Guainerio and Matteo dei Gradi, taking his M.D. in 1459. He was thus at Pavia twenty years earlier than Muenzer, though not so very much older. In 1460, he settled first in his native town Feldkirch to practise, where he stayed till 1468, and where he wrote a treatise "De balneis" on medicinal baths, extant in a Vienna manuscript. From 1472 on, he was appointed physician to the bishop and chapter of Augsburg, and resided there and at Memmingen until his death in 1499. Ellenbog's fine library of beautifully bound and kept books was bequeathed by him to the Benedictine abbey of Ottobeuern, where one of his sons had entered as a monk, and was kept together there until fairly recently. It was dispersed, however, by the Munich book-trade within the last twenty years, unfortunately before anybody had taken the trouble to note its contents while it was still intact. It would be difficult now to track down all the scattered volumes of which one very fine specimen again is in Dr. Harvey Cushing's library: a "Pharetra Doctorum" printed by Mentelin without date, but before 1474, the date on which Ellenbog purchased it, as he notes in the front cover. Being unable to say anything precise on the size and exact contents of Ellenbog's library, all I can affirm is that all his books I have ever seen (certainly over twenty) are finely printed big folios in their old white pigskin bindings, generally bearing a number of interesting marginal notes in his hand. There are three points, however, we know about Ellenbog which make him a far from shadowy figure for us, and indeed a most interesting and significant personality. Firstly, it was he, who on the foundation of the Bavarian University of Ingolstadt, was called upon to draw up the statutes of their medical faculty; but although he was appointed the first professor of medicine there, he does not seem to have cared for teaching, and returned to Augsburg in 1473. Secondly, he was not only a book-collector and a bookish person "scribendi impiger" and "perpetuae lectionis," as his son recorded about him, but he took a very important part in the establishment of one of the first printing presses at Augsburg,

that in the monastery of St. Ulrich and Afra. There is a volume containing five Augsburg *incunabula* in Cambridge University Library, bound up for Ulrich Ellenbog in 1476 and full of his autograph notes. It is from these notes that Robert Proctor, in one of his "Bibliographical Essays" (1905) says: "Ulrich Ellenbog and The Press of St. Ulrich at Augsburg" has reconstructed the interesting facts about the collaboration of the abbot, the doctor, and a journeyman printer, in setting up this important press which printed among other things a 'Vincent of Beauvais'.

Thirdly, there is among Ellenbog's medical writings—most of them small treatises of a few pages of the usual type—consilia about the plague and how to guard against it, "De simplicibus," "De venenis," and that sort of thing; one most remarkable pamphlet, a "consilium" dated 1473, in German, entitled: "Von den giftigen besen Tempffen un Reuchen der Metal; als Silber, Quecksilber, Bley und anders..."

"On the poisonous and noxious Vapours and Fumes of metals, such as Silver, Mercury, Lead, and others, which those of the noble craft of goldsmiths and other artisans who work with fire have to contend with. How they ought to deal with them and how to get rid of their poisons."

This pamphlet, which got printed at Augsburg about fifty years after it was written, gives a brief but quite correct account of the injuries to health threatening metal workers who expose themselves to lead or mercury vapours, to nitric and other acids, and warns also against coaldust and coal-vapours; it indicates a few simple remedies.

However slight, this pamphlet is the earliest ever written in the field of industrial hygiene, and, as such, a remarkable starting-point of a discipline of tremendous importance and consequence. Only a few years ago, in 1932, an English scholar, Dr. C. C. Barnard, gave a translation of it in the *Lancet*.

Clearly the fact that Ellenbog wrote such a pamphlet suffices to clear him of the imputation generally made against mediæval physicians, that they were men of mere book-learning, and shows him as a medical practitioner very fully alive to the problems of the world around him.

If Muenzer could be characterised as the geographer and traveller among the XVth century German book-collecting doctors, Schedel as the historian and assiduous copyist, Ellenbog as the originator of industrial medicine, what is there we could briefly say to label Burchard

von Horneck, who left his splendid library with 183 manuscripts to the bishop and chapter of Wuerzburg in 1522? He must have lived to a great age, for he graduated at Padua certainly before 1466, and in fact in 1509, Trithemius called him "grandævus." His books, both printed and manuscript, are still largely preserved in Wuerzburg University Library, and hence the best notice of him will be found in a Wuerzburg dissertation of 1907: Ignaz Schwarz: Die medizinischen Manuscripte der Koeniglichen Universitaets-bibliothek Wuerzburg. Few of them have strayed from there, sold as duplicates no doubt, but I do know two in the British Museum and an early printed Pliny in Dr. Harvey Cushing's library. He owned all the standard Italian XVth century medical textbooks, either printed or in manuscript, and his Latin classics prove him to have been a keen reader of general literature on humanistic lines. He wrote quite a few little books: a poem, "De ingenio sanitatis," twice printed in the XVth century, and another poem on St. Patrick's Purgatory, also extant in print. Among those works of his which survive only in manuscript there is a puzzling treatise, "Contra pestem inguinariam," discovered by Sudhoff in the Salzburg library and dated 1475. If that date is right, this treatise is a first-rate piece of evidence for those who contend for an earlier origin of syphilis than the Naples-war of 1494.

But unfortunately, nothing about this good Dr. Burchard von Horneck seems to be very reliable. He owned a manuscript of Camerino's well-known treatise about the plague, in which he has scratched out the author's name, substituting his own. In his fine manuscript of Montagnana's "Definitiones terminorum medicinalium," he has inserted a heading stating the book to be addressed: "ad dominum Brocardum de Horneck Alamannum scolarem novellum diligentissimum filium suum amantissimum"; it is certain, however, Montagnana was dead before Burchard came to Padua. So I am afraid one distinctive epithet we might give to Burchard von Horneck is that he was a liar.

An interesting group of fine incunabula from the library of another German doctor, Nicolaus Pol, is preserved now in the Cleveland Medical Library. There are about thirty of them, all in their old bindings, and bearing in their covers in very bold script the lettering: "Nicolaus Pol Doctor 1494." In spite of a good deal of endeavour, both on my part and on that of others, we know comparatively little of this Dr. Pol. He must have had a very fine and pretty large library, of which the Cleveland group is only a fraction. The majority of his books were housed in

an insignificant little Franciscan convent at Innichen (now San Candido) in the Southern Tyrol (now in Italy), immediately before they came on the market. But on my pre-war survey for the Gesamtkatalog, I also met them in quite considerable numbers in several monastic libraries of the Northern Tyrol, round Innsbruck, which accords with the attested fact that he was physician to the Emperor Maximilian I, who lived a good deal at Innsbruck. The date in his books is always 1494, whatever the date of impression; I now possess a book printed in 1511, with this inscription. This date can therefore not refer to the date of acquisition, and the most plausible explanation is that it is the date of his doctor's degree: Nicolaus Pol, Doctor 1494. But so far, his name, as far as I know, has not been found in any matriculation lists, and we do not know where he graduated. The only thing besides his fine surviving books, that we do know of Dr. Pol, is that he was the author of a treatise, "De Morbo Gallico", first printed in 1530. But we do not even know whether he was still alive when that book came out. I have never seen a book as late as 1530 with his ownership mark; in fact the 1511 book I just mentioned is, I think, the latest I have ever seen, and the majority of the Pol books are incunabula, including the splendid Ketham now in Cleveland.

We cannot possibly conclude a discourse on German medical bookcollectors without at least a brief mention of the foremost of them all: the greatest, the earliest, and, as the founder of a still existing great library, the most consequential: Amplonius Ratingk, the founder of the Collegium Amplonianum at Erfurt, and donor of its famous library. He belongs to a very much earlier generation than any of the preceding, having been born about 1363 at Rheinberg near Xanten in the Rhineland. So his earliest youth falls into the period before the establishment of any universities in Northern Germany, and he acquired the basis of his great learning and the earliest books for his library, at places like Osnabrueck and Soest where he also taught and copied manuscripts. His first teacher in Medicine seems to have been Tilmann von Syberg, court physician to Archbishop Frederick III of Cologne. The first university within the Holy Roman Empire was Prague in Bohemia, founded in 1363, and that is where Amplonius Ratingk took his bachelor's degree in 1385, his M.A. in 1387; it is likely that he also studied at Vienna, and it is certain that in 1401 he visited Italy, but only briefly.

Ratingk was associated with both the newly founded universities of

Cologne and of Erfurt from their very inception, and although he seems to have resided chiefly at Cologne, his principal benefactions went to Erfurt where he was Rector from 1393 to 1395, and where he took his M.D. In 1412 Ratingk founded his college, the Collegium Amplonianum, at Erfurt, and kept on adding to its endowment until his death in 1435.

Amplonius Ratingk was a book-collector in the grand style, who not only kept a staff of copyists writing books for him continuously, but who went travelling about himself in the pursuit of books; we know, for instance, that he went to Bruges in Flanders to acquire a collection of forty manuscripts from the executors of the estate of a prelate, and we know that he bought books continually both from Paris and from Italy.

From 1410 to 1412, before handing over his library to his college, he himself drew up its catalogue, which is still extant, as well as the books themselves, at Erfurt in the "Amploniana." It lists 640 manuscripts which are arranged in twelve classes:

1. Grammatica (36 volumes); 2. Poetica (37); 3. Logica (27); 4. Rhetorica (12); 5. Mathematica (which includes Music, Astrology, Magic, and Necromancy: 73 volumes); 6. Philosophia Naturalis, including Alchemy (64 volumes); 7. Metaphysics (15 volumes); 8. Philosophia Moralis (35 volumes including Sallust, Cassiodorus, Vegetius, Cicero); 9. Medicine (101 volumes); 10. Civil Law (7); 11. Canon Law (16); 12. Theology (213 volumes).

This library catalogue is not only remarkable for its extent and for its systematic arrangement; it even comprises the express mention of titles wanted "quae volumina Dei adiutorio procurabuntur." Amplonius also drew up the statutes and regulations for the use of his library. Only post-graduate members of the Collegium Amplonianum had a right to be admitted; graduate members of other colleges had to apply to the Dean for admission. Loans were permitted, but carefully regulated, and the library was to be open from eight to one o'clock. Readers were admonished to be "fideles in libris."

The Bibliotheca Amploniana with its manuscript treasures still exists, and it numbers now 978 manuscripts having both suffered losses of its ancient stock and gained accessions in the course of the centuries. It is a wonderful monument to a great man who was certainly one of the founders of scientific university studies in Germany, and a glory of the medical faculty of which he was a member.